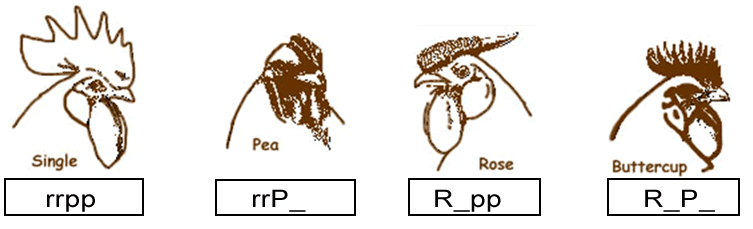
**Multiple Allele Traits in Chickens**

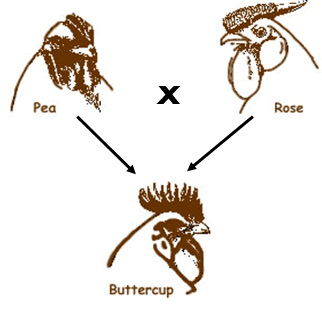
All chicken have combs on their heads, but it does not always look the same. Comb is a fleshy growth on the top of the chicken head. Both male and female chickens have combs, but the ones on the male are larger. Combs of different breeds may look different in shape and even in color.

**NAME** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*The dash (missing allele) indicates that the allele may be dominant or recessive. It will not affect the phenotype.*



1. On the cross pictured, what must be the genotypes of the two parents for the outcome to always be a buttercup offspring?

\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_\_

2. Show a Punnett square for the following cross and describe the phenotypic ratios.  
RrPp x RrPp

3. Show a punnett square for the following cross and describe the phenotypic ratios.  
Single comb x Buttercup (RrPp)

4. Show a punnett square for the following cross and describe the phenotypic ratios.  
Single comb x Pea comb (rrPp)

 5. A rose crossed with a pea produces six buttercup and five rose offspring. What must be the genotypes of the parents?